

follow-up duration and catheter, so uncertainty may exist regarding overall therapy effectiveness. The objective of this analysis is to conduct a systematic review and direct meta-analysis of relevant RDN studies to provide a more powerful estimate of the true effect size to inform clinical decisions and economic evaluations. **METHODS:** RDN publications were identified through MEDLINE, EMBASE and Cochrane databases and manual searching (June 2013). Pre-specified inclusion criteria identified all studies (regardless of catheter used) enrolling TR-HTN patients (SBP  $\geq$  160 mmHg despite  $>3$  anti-hypertensive drugs including a diuretic). Results were presented as weighted mean decrease (WMD) in office-based SBP over 6 months. **RESULTS:** A total of 57 trials were identified (1 RCT, 11 case control, 16 single arm, 29 case series), yielding 28 studies ( $n=896$ ) for meta-analyses. All were open label and reported significant reductions in systolic and diastolic blood pressure. The overall WMD in SBP from all studies was  $-28.1$  mmHg (95% CI:  $-24.5$  to  $-31.6$ ). Analysis of only comparative trials produced a reduction from baseline SBP ranging from  $-31.7$  mmHg (95% CI:  $-25.26$  to  $-38.14$ ) in the RCT ( $n=49$ ) to  $-26.75$  mmHg (95% CI:  $-22.19$  to  $-31.31$ ) for the pooled case control trials ( $n=56$ ). **CONCLUSIONS:** Over 6 months, RDN was associated with substantial SBP reductions in patients with TR-HTN. However, the majority of eligible trials were non-randomised, unblinded and used the Symplicity catheter. This may have influenced the magnitude of the treatment effect observed.

#### PCV14 A RETROSPECTIVE COST-EFFECTIVENESS ANALYSIS OF S-AMLODIPINE IN CHINA

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**OBJECTIVES:** The paper is to compare the difference between S-Amlodipine and racemic amlodipine by using respective cost-effectiveness analysis **METHODS:** The authors use two head-to-head multi-center, RCT studies' clinical efficacy data, Levamlodipine Besylate tablets (Shiweida® 2.5 mg/day) was selected as test group and Amlodipine Besylate tablet (Norvasc® 5mg/day), as a control group. The blood pressure and cost of drug were compared in short-term (8 weeks) and long-term (6 months) therapeutic regimes. **RESULTS:** After 4-8 weeks treatment, there was no statistical significant difference in efficacy rate between S-Amlodipine group (110cases) and racemic Norvasc group (104 cases) 84.91% vs. 77.45%. The cost of reducing 1 mmHg systolic pressure and diastolic pressure in S-Amlodipine group was 8.1Yuan (RMB) and 10.5Yuan (RMB), and Norvasc was 16.9Yuan (RMB) and 21.7Yuan (RMB), respectively. The cost of Norvasc is 100% higher than that of S-Amlodipine. In the results of 6-month long-term treatment, The cost of reducing 1 mmHg systolic pressure and diastolic pressure in S-Amlodipine group (124 cases) was 31Yuan (RMB) and 43Yuan (RMB), and 50Yuan (RMB) and 75Yuan (RMB) in Norvasc group (104 cases), respectively. The cost of Norvasc is 1.62-1.79 times higher than that of S-Amlodipine. Meanwhile, the study shows that the cost of reducing 1mmHg diastolic blood pressure is much higher than that of reducing 1mmHg systolic blood pressure. The adverse reaction of S-Amlodipine group (4.6%) is significantly lower than Norvasc group (10.3%). The sensitivity analysis based on average price and medium price of two-cluster products in China, the S-Amlodipine has more economic value. **CONCLUSIONS:** The domestic product of S-Amlodipine is more cost-effectiveness than the original Norvasc product. At present, the market volume and value of S-Amlodipine in total CCB market is about 30 percent. The authors suggest to do further postmarketing clinical trial and parallel prospective pharmacoeconomic evaluation to collect more strong basis of evidence.

#### PCV15 STUDY OF MEDICATION ADHERENCE IN DIABETES MELLITUS PATIENTS WITH HYPERTENSION

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**OBJECTIVES:** The current investigation is aimed to understand the impact of medication adherence on reasons for non adherence and adherence and control of disease, in diabetes mellitus (DM) with hypertension (HTN) patients Morisky medication adherence scale (MMAS). **METHODS:** In this prospective observational study, the inclusion criteria for patients to be enrolled are condition of DM with HTN comorbidity and patients taking same medication since last two months. Patients with DM along with more than two comorbidities were excluded from the study. The demographic details (patient name, age, sex, occupation, patient income, address, social history, family history, physical activities) and MMAS, blood pressure, fasting blood sugar (FBS) and post lunch blood sugar (PLBS) levels were collected from the enrolled patients. Reasons for non adherence were recorded from low adherence patients. **RESULTS:** During the study total 300 patients were reviewed of which only 128 (42.66%) patients were enrolled into study among them 63 (49.3%) were male and 65 (50.7%) were female. According to MMAS, patients with high adherence were 39 (30.4%), medium adherence was 30 (23.4%), and low adherence was 59 (46%). The reasons for lack of adherence in low adherence patients are low socioeconomic status (18%), lack of knowledge about impact of non adherence on medication (16%), followed by patients negligence (12%) and others (13%). However the results of all the therapeutic outcomes in the study like average blood pressure (mmHg), average FBS (mg/dl) and average PLBS (mg/dl) in high adherence, medium adherence and low adherence patients showed variation based on degree of adherence. **CONCLUSIONS:** The adequate adherence of medication is the prior therapeutic option to control DM with HTN patients.

#### PCV16 EFFICACY OF AYURVEDIC FORMULATION IN THE MANAGEMENT OF ESSENTIAL HYPERTENSION

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**OBJECTIVES:** Essential Hypertension (EHT) is described as silent killer as it is almost symptomless. However mild symptoms like headache, loss of sleep, giddiness, redness in the eye and restlessness comprise of morbidity. In this study Gandharvathadi Kashayam (GK) consisting of polyherbal medicines was studied in the management of EHT. **METHODS:** The case control study was administered for 30 patients who were diagnosed with EHT. For one month, Each patient was administered 15 ml bid with GK, half an hour before food. Systolic Blood Pressure (SBP) was in the range of 140-160 and Diastolic (DBP) was 90 to 100 were included in the study. The morbidity was scored by history taking. **RESULTS:** After one month The SBP was 126 -136 and DBP 80- 86; the headache was relieved in 15 patients, improvement in loss of sleep reported in 22 patients, redness in the eye was relieved 2 patient out of 5. 20 patients expressed relief from restlessness. **CONCLUSIONS:** The GK is found to control SBP and DBP in all patients studied. In addition it has shown improvement in morbidity of EHT patients.

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**OBJECTIVES:** The purpose of this study is to examine whether there is quality differences among AMI patients by severity of cases and by payers status. **METHODS:** The Study examined the outcome differences of acute myocardial infarction (AMI) at the National Cardiovascular Center (NCC) Harapan Kita, Jakarta, Indonesia. This study analyzed medical records of patients with AMI during the period of January 1, 2009 until December 31, 2012. **RESULTS:** The study found 5,472 patients with AMI consisting of 81.5% males and 18.5% females with the mean age of 56.3 years (range between 21-97 years vs. 26-96 years). Most of the patients were from Jakarta (51%). On severity levels, 46% patients were in severity level I, 47.7% severity level II, and 5.9% level III. More than half (54.6%) patients were treated with intervention (PTCA) or surgical procedures (CABG), while 44.4% patients were treated conventionally. We found that 43.7% of patients were covered by public insurance, and only 2.9% were on Medicaid. The average length of stays was 7.7 days and 87.8% were discharged in a good recovery. There was no difference in quality of treatment by difference payers or payment system although there was significant discrepancies in charges among difference payers. **CONCLUSIONS:** It is concluded that the doctors provided the same quality of services among AMI patients, regardless of payers' status or charges. There was no difference in outcome of care among different payers.

#### PCV18 USE OF CALCIUM CHANNEL BLOCKERS IN SERBIA IN THE PERIOD FROM 2008 TO 2012 YEAR

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**OBJECTIVES:** Calcium channel blockers are drugs of first choice in the treatment of hypertension. The aim of this study was to analyze the consumption of calcium channel blockers in Serbia in the period from 2008 to 2012 year. **METHODS:** The data about the use of drugs were taken from the Agency for Drugs and Medical Devices of the Serbia. **RESULTS:** The most frequently used drug from this group with mainly vascular effects was amlodipine. During this observed five years the consumption of amlodipine is in steadily increased. In 2008. it was 32.00 DDD/1000 inh/day, at the end of 2011. year the consumption reached it maximum and it ranged 72.97 DDD/1000 inh/day. In 2012. the consumption of this drug records small fall, and it ranged 66.64 DDD/1000 inh/day. On the second place in drug consumption in the same group of drugs was nifedipine. Contrary to amlodipine, nifedipine records a decline in consumption. From the calcium channel blockers with direct cardiac effects the most frequently used drugs were verapamil and diltiazem. The consumption of verapamil in the observed years was uneven. At the end of 2012. consumption of this drug was reduced by 50%. The consumption of diltiazem in observed five years is in constantly decreasing. **CONCLUSIONS:** In Serbia, in the observed period the consumption of calcium channel blockers been uneven. In 2011. and 2012. the consumption of calcium channel blockers marks a positive trend. This research was supported by Provincial Secretariat for Science and Technological Development, Autonomous Province of Vojvodina project No 114-451-2458/2011 and by Ministry of Science, Republic of Serbia, project no 41012.

#### PCV19 USE OF BETA BLOCKING AGENTS IN SERBIA IN THE PERIOD FROM 2008 TO 2012 YEAR

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**OBJECTIVES:** Beta blocking agents are drugs of first choice in the treatment of hypertension. The aim of this study was to analyze the consumption of beta blocking agents in Serbia in the period from 2008 to 2012 year. **METHODS:** The data about the use of drugs were taken from the Agency for Drugs and Medical Devices of the Serbia. **RESULTS:** During the observed period in Serbia the consumption of selective beta blocking agents were dominant. The most frequently used drug from this group was metoprolol. During this five years the consumption of metoprolol is in steadily decreased. In 2008. it was 33.32 DDD/1000 inh/day, at the end of 2012. year the consumption was 22.09 DDD/1000inh/day. On the second place in drug consumption in the same group of drugs was atenolol, but only in 2008. From 2009-2012, atenolol records a decline in consumption and bisoprolol takes the second place in drug consumption in that period. At the beginning of 2008. consumption of this drug was small, gradually grew and reached its maximum in 2012, and it ranged 20.64 DDD/1000inh/day. From the unselective beta blocking agents the most frequently used was propranolol and his consumption in the observed years was constant. **CONCLUSIONS:** In Serbia, in the observed period the consumption of beta blocking agents been mostly constant. From all drugs in group of beta blocking agents the most frequently used are metoprolol, atenolol,